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10/583,621	03/26/2007	Hans Beer	2003P01722WOUS	5952
46726 7590 05/09/2011 BSH HOME APPLIANCES CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 100 BOSCH BOULEVARD NEW BERN, NC 28562				
EXAMINER CHAUDHRY, SAEED T				
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/583,621  
Filing Date: March 26, 2007  
Appellant(s): BEER ET AL.

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Andre Pallapies  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 25, 2011 appealing from the Office action mailed June 29, 2010.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 13-24.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

Wyman, Patrick Roy. UK Patent 2,221,384-A (July 02, 1990).

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5,849,101 Edwards et al. 12-1998

5,355,900 Sakata 10-1994

DE-2441361 (March 11, 1976).

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 13-15, 18-19, 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman in view of Eiermann et al.**

Wyman (GB-2221384) discloses a method and apparatus for operating a dishwasher having a pre-wash cycle, a wash cycle, a rinse cycle and a dry cycle, wherein speed of the re-circulating pump is varied. The speed of the re-circulating pump convey the liquid to at least one spray device in order to remove food residue and inherently vary the pressure of liquid by varying the speed of the pump. The quantity of the liquid spray would change with the change of

the speed of the pump. After each and every rinse cycle, wash cycle and rinse cycle used liquid is discharged with emptying pump and sump is refilled with water. Wyman also, disclose means to control the sequence of operation of all the elements of the dishwasher and means for periodically varying the strength of the jets. (see page 4, line 2 to page 5, line 34 and claims). The reference fails to disclose an intermediate rinse cycle, 30-60%, 50-100% and then 30-60% capacity of the pump.

Eiermann et al. (2002/0108639) disclose a method and apparatus for operating a dishwasher. A conventional complete dishwashing program runs in partial steps--namely, as is usual, in five partial program steps. These steps include the partial program step pre-wash, the partial program step "clean", the partial program step "intermediate rinse", the partial program step "final rinse", and the partial program step dry (see [0018]).

It would have been obvious at the time applicant invented the claimed process to incorporate the intermediate rinse cycle as disclosed by Eiermann et al. into the process and apparatus of Wyman for the purpose of increasing the rinsing effect for removal of the detergent solution from the objects. Further, it is conventional in the art as disclosed by Eiermann et al. to have multiple rinse cycles in the washing process.

Wyman discloses to start the pump speed at 2000 to 2100 rpm and then after some time change the speed to 2700 rpm. One of ordinary skill in the art would have operated the pump at 30-60%, 50-100 and then 30-60% capacity of the pump with routine experimentation for the purpose of increase cleaning effect, since these limitations do not provide any specific advantage over the of Wyman disclosed limitation.

**Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman in view of Eiermann et al. as applied to claim 13 above, and further in view of Edwards et al.**

Wyman and Eiermann et al. were discussed supra. However, the references fail to disclose a step of intermittently operate the circulation pump.

Edwards et al. (5,849,101) disclose a method and apparatus for operating a dishwasher. Wherein the wash switch 44 is open and the wash interval switch 50 controlled so that the pump 22 operates intermittently during "on-times" in each of the main wash, first rinse, and second rinse cycles (see col. 6, lines 8-11)

It would have been obvious at the time applicant invented the claimed process to incorporate the cited steps of intermittently operating circulation pump as disclosed by Edwards et al. into the process of Wyman for the purpose of efficient cleaning the objects in the dishwasher. One of ordinary skill in the art would have operate circulation pump during the water is admitted into the dishwasher and find the better operating time for the pump by routine experimentation, since Edwards et al. disclose to operate during the main cycles.

**Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman in view of Eiermann et al. as applied to claim 13 above, and further in view of DE-2441361.**

Wyman and Eiermann et al. were discussed supra. However, the references fail to disclose a step of introducing part of the total washing liquid in the pre-wash and clear rinse cycle.

DE-2441361 discloses a method of operating a dishwasher, wherein a part of liquid of total volume of liquid is introduced into the dishwasher during the cycle (see abstract).

It would have been obvious at the time applicant invented the claimed process to incorporate the cited steps using part of the total volume of the liquid as disclosed by DE-2441361 into the process of Wyman to save the cleaning liquid and to reduce the cost of the liquid and energy.

**Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman in view of Eiermann et al. as applied to claim 13 above, and further in view of Sakata.**

Wyman and Eiermann et al. were discussed supra. However, the references fail to disclose a step of intermittently operate the drainage pump.

Sakata (5,355,900) discloses a method and apparatus for operating a dishwasher. Wherein the drain pump 36 is actuated intermittently to drain the water from the dishwasher 10 (see col. 4, lines 18-20).

It would have been obvious at the time applicant invented the claimed process to incorporate the cited steps of intermittently operate drainage pump as disclosed by Sakata into the process of Wyman for the purpose of efficiently removing the used liquid from the dishwasher.

**Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wyman in view of Eiermann et al. as applied to claim 13 above, and further in view of Edwards et al. and Sakata.**

Wyman and Eiermann et al. were discussed supra. However, the references fail to disclose a step of intermittently operate the drainage pump and circulating pump.

Edwards et al. and Sakata were discussed supra.

It would have been obvious at the time applicant invented the claimed process to alternately use circulation pump and a drainage pump since Edwards et al. and Sakata disclose to use circulation pump intermittently and Sakata disclose to drain pump intermittently. One of ordinary skill in the art would have use pumps alternately for the purpose of removing the total liquid from the dishwasher.

#### **(10) Response to Argument**

Appellant argued that the variation of the pump 15 in the Wyman dishwasher is varied for the purpose of controlling the level of acoustic noise during a wash process (see Wyman at page 1, line 15 - page 2, line 8) and not for the purpose of preventing the clogging of a filter.

This argument is not persuasive because varying the rpm of the pump changes the quantity and pressure of the liquid, which read on the claimed process. Further, even Wyman is concerned about the noise of the dishwasher but varying the rpm of the pump will change the quantity and pressure of the liquid and therefore, inherently remove small quantity of food and therefore the filter remains functional. The applicant has not provided any different steps which changes the food quantity and the filter remains open. The claimed process only recites a step of varying a pressure which is performed by the Wyman disclosed process.

Appellant argued that Wyman does not disclose or suggest a predetermined hydraulic abrasion capacity nor does it ensure that its filter remains functional in a remainder of the wash program as recited in independent claim 13.

This argument is un-persuasive because the claimed process does not include any different steps which provide a predetermined hydraulic abrasion capacity and ensure that its



filter remains functional. The applicant has not shown that the Wyman process does not perform these steps.

Appellant argued that while the grounds of rejection allege that it would have been obvious at the time Applicants invented the claimed process to incorporate the intermediate rinse cycle as disclosed by Eiermann et al. into the process and apparatus of Wyman for the purpose of increasing the rinsing effect for removal of the detergent solution from the objects, Applicants respectfully submit that this would not disclose or suggest using a predetermined hydraulic abrasion capacity feature as in the present invention to ensure a filter remains functional in a remainder of the wash program.

This argument is not persuasive because the claimed process does not include any different steps which provide a predetermined hydraulic abrasion capacity and ensure that its filter remains functional. The applicant has not shown that the Wyman process does not perform these steps.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Saeed T Chaudhry

Conferees:

(1) /Saeed T Chaudhry/

Art Unit: 1711

Examiner, Art Unit 1711

(2) /Michael Barr/

Supervisory Patent Examiner, Art Unit 1711

(3) /Christine Tierney/

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